20060528.ba v03_n925.bam.20060528

>From ???@??? Sat May 27 21:29:44 2006 -0500
Date: Sun, 28 May 2006 01:58:28 GMT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3925
Message-Id: <20060528015829.EB06D1B7BD0@srvr1.theporch.com>

BOATANCHORS Digest 3925

Topics covered in this issue include:

1) Re: Where Is Vintage Solid-State Email List?
by john <johnmb@nc.rr.com>
2) Re: Where Is Vintage Solid-State=>HERE
by john <johnmb@nc.rr.com>
3) mad about HRO-500's
by "Tom Rauch" <w8ji@contesting.com>
4) Re: mad about HRO-500's
by Richard Dillman <ddillman@igc.org>
5) RE: ID-637/ARN-59
by "Dr. Barry L. Ornitz" <ornitz@charter.net>
6) Re: ID-637/ARN-59
by "Tom Smith" <tsmith@hal-pc.org>
7) RG-22 ?
by "B. Smith" <smithab11@comcast.net>
8) Selsyns
by "Bill Hawkins" <bill@iaxs.net>
9) Re: RG-22 ?
by Al Klase <al@ar88.net>
10) Re: Selsyns
by "Morris Odell" <vilgotch@bigpond.net.au>
11) Hallicrafters SX-88 Receiver For Sale or Trade
by "Gary H. Harmon Jr." <gharmon@idworld.net>
12) Re: ID-637/ARN-59
by "Mark J. Blair, NF6X" <nf6x@nf6x.net>
13) Re: ID-637/ARN-59
by "Morris Odell" <vilgotch@bigpond.net.au>
14) Re: ID-637/ARN-59
by "Dr. Barry L. Ornitz" <ornitz@charter.net>
15) Help ID'ing Homebrew Amp.
by "Dennis Wade" <sacramento.cyclist@gmail.com>
16) Re: Help ID'ing Homebrew Amp.
by "Dennis Wade" <sacramento.cyclist@gmail.com>

Message-Id: <6.2.1.2.2.20060524173859.0254b1d0@pop-server.nc.rr.com>

Date: Wed, 24 May 2006 17:39:08 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: john <johnmb@nc.rr.com>
Subject: Re: Where Is Vintage Solid-State Email List?
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed

OK, I'll go for it!

John K5MO

At 05:28 PM 5/24/2006, Jerry Proc wrote:
>Hi Everyone,
>
>It takes less than 10 minutes to start a new group on
>Yahoogroups.com
>
>One good way to gauge the interest in a resurected VSS
>list is to have someone start the group then give it
>some press. If there is any interest it will grow. If
>there is no activity for 60 days, Yahoogroups will
>kill it.
>
>---
>
>
>
>--- Gary Woods <garygarlic@earthlink.net> wrote:
>
> > On Tue, 23 May 2006 15:37:31 -0700, you wrote:
> >
> > >I may be lynched for heresy but I don't see why
> > genuinely vintage
> > >transistorized ham gear can't be discussed on this
> > list. SS, it's been
> > >around since the late 50's. If that ain't vintage
> > enough I don't know what
> > >is.
> >
> > I'll met you halfway: Germanium only!
> > And some of those hybrid beasts ought to qualify
> > based on weight and age.
> >
> >
> >
> > Gary Woods O- K2AHC   Public keys at
> > home.earthlink.net/~garygarlic, or get 0x1D64A93D

> > via keyserver
> > fingerprint = E2 6F 50 93 7B C7 F3 CA 1F 8B 3C C0
> > B0 28 68 0B
> >
> >
>
>
>--
>Regards,
>Jerry Proc
>E-mail: jerry7proc@yahoo.com
>
>____
>Do You Yahoo!?
>Tired of spam? Yahoo! Mail has the best spam protection around
>http://mail.yahoo.com
>
>
>--
>No virus found in this incoming message.
>Checked by AVG Free Edition.
>Version: 7.1.394 / Virus Database: 268.7.1/347 - Release Date: 5/24/2006

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.394 / Virus Database: 268.7.1/347 - Release Date: 5/24/2006

Message-Id: <6.2.1.2.2.20060524174904.025ca530@pop-server.nc.rr.com>
Date: Wed, 24 May 2006 17:49:59 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: john <johnmb@nc.rr.com>
Subject: Re: Where Is Vintage Solid-State=>HERE
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed

I giess usage will determine its viability!

Group name: VintageSS
Group home
page:
<http://groups.yahoo.com/group/VintageSS>http://groups.yahoo.com/group/VintageSS

Group email: <mailto:VintageSS@yahoogroups.com>VintageSS@yahoogroups.com

```
Have fun!
John





At 05:39 PM 5/24/2006, john wrote:
>OK, I'll go for it!
>
>John K5MO
>
>
>At 05:28 PM 5/24/2006, Jerry Proc wrote:
>>Hi Everyone,
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>>It takes less than 10 minutes to start a new group on
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>>
>>
>>
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>> > >I may be lynched for heresy but I don't see why
>> > genuinely vintage
>> > >transistorized ham gear can't be discussed on this
>> > list.  SS, it's been
>> > >around since the late 50's.  If that ain't vintage
>> > enough I don't know what
>> > >is.
>> >
>> > I'll met you halfway:  Germanium only!
>> > And some of those hybrid beasts ought to qualify
>> > based on weight and age.
>> >
>> >
>> >
>> > Gary Woods O- K2AHC   Public keys at
```

>> > home.earthlink.net/~garygarlic, or get 0x1D64A93D
>> > via keyserver
>> > fingerprint = E2 6F 50 93 7B C7 F3 CA 1F 8B 3C C0
>> > B0 28 68 0B
>> >
>> >
>>
>>
>>--
>>Regards,
>>Jerry Proc
>>E-mail: jerry7proc@yahoo.com
>>
>>____
>>Do You Yahoo!?
>>Tired of spam? Yahoo! Mail has the best spam protection around
>>http://mail.yahoo.com
>>
>>
>>--
>>No virus found in this incoming message.
>>Checked by AVG Free Edition.
>>Version: 7.1.394 / Virus Database: 268.7.1/347 - Release Date: 5/24/2006
>
>
>
>--
>No virus found in this outgoing message.
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>
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--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.394 / Virus Database: 268.7.1/347 - Release Date: 5/24/2006

Message-ID: <006401c67fa8$fe11f1e0$6401a8c0@radioroom>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>

Subject: mad about HRO-500's
Date: Wed, 24 May 2006 23:12:00 -0400
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

Just when we think we've seen it all, someone got so mad at
their HRO-500 receiver they put a bullet through it....

http://cgi.ebay.com/NATIONAL-HRO-500-Receiver-parts-restore-project_W0QQitemZ9729807712QQcategoryZ4673QQrdZ1QQcmdZViewItem

----

Message-ID: <18899950.1148528892786.JavaMail.root@mswamui-cedar.atl.sa.earthlink.net>
Date: Wed, 24 May 2006 20:48:12 -0700 (GMT-07:00)
From: Richard Dillman <ddillman@igc.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: mad about HRO-500's
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

>Just when we think we've seen it all, someone got so mad at
>their HRO-500 receiver they put a bullet through it....

Hee. He sure taught that receiver a lesson!

This reminds me of a KPH HRO story I must tell. There were no firearms involved and in fact the HRO-500 in question did its job very well. KPH ops had to continually scan the calling frequencies manually so the receivers were constantly being tuned. The tuning knob of one of our HRO-500s is worn *absolutely smooth* by the hands of many ops over the years.

RD

=================================

Richard Dillman, W6AWO
Maritime Radio Historical Society
http://www.radiomarine.org
Collector of Harleys, Willys and
Radios over 100lbs.

=================================

From: "Dr. Barry L. Ornitz" <ornitz@charter.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: ID-637/ARN-59
Date: Wed, 24 May 2006 23:51:41 -0400
Message-ID: <003201c67fae$89b1dd50$36a8b844@barry1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi Mark and the group,

The indicator does not use DC signals, but rather, a 400 Hz selsyn. I think it was a 26-volt version. If you are not familiar with basic synchros or selsyns, these are basically specialized forms of motors. The rotor winding is excited with an AC voltage, and the stator has three windings each 120 degrees out of phase with each other. If two selsyns are connected with the rotors fed in parallel, and if the stator windings connected to each other properly, turning the rotor of one unit will cause the rotor of the second unit to match the rotation nearly exactly. The size of a selsyn is determined by the amount of torque needed. In the case of the indicator you have, virtually no torque is needed to rotate the indicator.

In the radio compass, one selsyn is mechanically coupled to the loop antenna. When the antenna is rotated, the indicator turns to follow the rotation and indicate direction. Accuracy can easily be better than 1/4 degree.

The QST article called for destroying the connector, which is really not necessary. I think the excitation was between one pin and ground, while the other three pins connect to the individual stator windings. I believe a "Y" connection is used with the common also connected to ground.

To use your unit, only a source of 400 Hz at the right voltage is needed - and, of course, a second selsyn of the proper type to attach to the rotating part to monitor. Typically this might be an antenna rotator or a crank unit turning a DF loop.

A quick search did not find it, but I have an old book on the design radio direction finders. If I remember correctly, the unit you are talking about has a null seeking circuit that drives a small motor that turns the antenna to achieve null. The indicator merely shows the same angle as the antenna.

I am sure you can find lots of information on selsyns on the Internet although they are considered old technology today (*). The ARRL Antenna

Books often contained information on hooking up selsyns for rotating antennas too. Let me know if you need me to do a more thorough search for the book!

73, Barry WA4VZQ Ornitz@tricon.net

(*) There are specialized analog-to-digital converters known as selsyn-to-digital converters made by several companies these days. I have a pair of obsolete Analog Devices IC chips that produce a 14-bit code from a selsyn output. Today, optical encoders are tending to replace selsyns in industrial applications. These encoders can be absolute or relative encoders, or relative encoders with an addition output to synchronize an electronic counter to the "zero" position of the encoder.

>
> I've had an ID-637/ARN radio compass azimuth indicator sitting around
> for a decade or two, and I've occasionally entertained the idea of
> finding an excuse to use it for something. I believe that it was part of
> the AN/ARN-59 aircraft DF set. There is a 4-pin connector on the back.
> Do any of y'all know the pinout, what sort of signals are needed to
> drive it, etc.?
>
> If I had to make a wild guess, I'd say that the driving signals are DC
> sine and cosine voltages with a maximum magnitude of +/- 28VDC (since
> the dataplate says "28 V.D.C.").
>
> I guess that a mating connector would be helpful; it's the ARC-style
> kind with pins like mini banana plugs.
>
> --
> Mark J. Blair, NF6X <nf6x@nf6x.net>
> Web page: http://www.nf6x.net/
> GnuPG public key available from my web page.

From: "Tom Smith" <tsmith@hal-pc.org>
Subject: Re: ID-637/ARN-59
To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 25 May 2006 06:57:11 -0500
Message-ID: <web-261209465@mail.hal-pc.org>
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"; format="flowed"
Content-Transfer-Encoding: 8bit

I have a pair of brass selsyns that go about 20 lbs each. I think my Dad liberated them from WW2 stuff. He was a Chief Radio Technitian in the Navy.

Have a nice holiday weekend,

Tom N5AMA

On Wed, 24 May 2006 23:51:41 -0400
  "Dr. Barry L. Ornitz" <ornitz@charter.net> wrote:
> Hi Mark and the group,
>
> The indicator does not use DC signals, but rather, a 400 Hz selsyn.
> I
> think it was a 26-volt version. If you are not familiar with basic
> synchros or selsyns, these are basically specialized forms of
>motors. The
> rotor winding is excited with an AC voltage, and the stator has
>three
> windings each 120 degrees out of phase with each other. If two
>selsyns are
> connected with the rotors fed in parallel, and if the stator
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> connected to each other properly, turning the rotor of one unit will
>cause
> the rotor of the second unit to match the rotation nearly exactly.
> The
> size of a selsyn is determined by the amount of torque needed. In
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> of the indicator you have, virtually no torque is needed to rotate
>the
> indicator.
>
> In the radio compass, one selsyn is mechanically coupled to the loop
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>1/4
> degree.
>
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>not
> necessary. I think the excitation was between one pin and ground,
>while
> the other three pins connect to the individual stator windings. I
>believe
> a "Y" connection is used with the common also connected to ground.
>
> To use your unit, only a source of 400 Hz at the right voltage is
>needed -
> and, of course, a second selsyn of the proper type to attach to the

> rotating part to monitor. Typically this might be an antenna
>rotator or a
> crank unit turning a DF loop.
>
> A quick search did not find it, but I have an old book on the design
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> direction finders. If I remember correctly, the unit you are
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> has a null seeking circuit that drives a small motor that turns the
>antenna
> to achieve null. The indicator merely shows the same angle as the
>antenna.
>
> I am sure you can find lots of information on selsyns on the
>Internet
> although they are considered old technology today (*). The ARRL
>Antenna
> Books often contained information on hooking up selsyns for rotating
> antennas too. Let me know if you need me to do a more thorough
>search for
> the book!
>
>   73, Barry   WA4VZQ   Ornitz@tricon.net
>
> (*) There are specialized analog-to-digital converters known as
> selsyn-to-digital converters made by several companies these days.
> I have
> a pair of obsolete Analog Devices IC chips that produce a 14-bit
>code from
> a selsyn output. Today, optical encoders are tending to replace
>selsyns in
> industrial applications. These encoders can be absolute or relative
> encoders, or relative encoders with an addition output to
>synchronize an
> electronic counter to the "zero" position of the encoder.
>
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>>around
>> for a decade or two, and I've occasionally entertained the idea of
>> finding an excuse to use it for something. I believe that it was
>>part of
>> the AN/ARN-59 aircraft DF set. There is a 4-pin connector on the
>>back.
>> Do any of y'all know the pinout, what sort of signals are needed to
>> drive it, etc.?
>>
>> If I had to make a wild guess, I'd say that the driving signals are

```
>>DC
>> sine and cosine voltages with a maximum magnitude of +/- 28VDC
>>(since
>> the dataplate says "28 V.D.C.").
>>
>> I guess that a mating connector would be helpful; it's the ARC-style
>> kind with pins like mini banana plugs.
>>
>> --
>> Mark J. Blair, NF6X <nf6x@nf6x.net>
>> Web page: http://www.nf6x.net/
>> GnuPG public key available from my web page.
>

------------------------------
Message-ID: <002e01c67ffa$d8ac2630$3b19c847@HAL1000>
From: "B. Smith" <smithab11@comcast.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RG-22 ?
Date: Thu, 25 May 2006 08:57:55 -0400
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

Anyone have about 10 feet of the older RG-22 or RG-23 Twinax cable. Shielded
coax with two center conductors? Or anything similiar?  Needed for a R-1155
receiver DF project.


breck k4che

Dover, Delaware. Ann't nutten in Dover except a NASCAR track, chickens, and
hams that can't solder.

------------------------------
From: "Bill Hawkins" <bill@iaxs.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Selsyns
Date: Thu, 25 May 2006 11:54:58 -0500
Message-ID: <002001c6801b$f4c41000$0500a8c0@darius.domain.actdsltmp>
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
```

Tom Smith wrote,

"I have a pair of brass selsyns that go about 20 lbs each. I think my Dad liberated them from WW2 stuff. He was a Chief Radio Technitian in the Navy."

Those may be 60 cycle, 110 V selsyns. The Navy used a pair of them to indicate position, geared 36:1 so that one went around every 10 degrees.

There were other things that looked like selsyns, but weren't. A Control Transformer (CT) has a rotor that is designed to work into a grid, not be powered from the line. A servomechanism used a CT to detect the null between the source position and the position of the driven thing, like a gun turret.

IIRC, there were differential transformers where the rotor was also 3 phase (6 wires in all). The rotor transmitted the difference between its position and the remote position, giving relative bearing of the remote position. Or true bearing, if the rotor was attached to the antenna and the remote position came from a gyro compass.

Aircraft designers turned to 400 cycle power to save weight.

Regards,
Bill Hawkins

Message-ID: <4475E709.90500@ar88.net>
Date: Thu, 25 May 2006 13:19:05 -0400
From: Al Klase <al@ar88.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: RG-22 ?
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

Hi Breck,

I have a hunk of Belden 9207 100-ohm Twinax. Will ten feet be enough?

73,
Al

B. Smith wrote:

> Anyone have about 10 feet of the older RG-22 or RG-23 Twinax cable.
> Shielded coax with two center conductors? Or anything similiar?

> Needed for a R-1155 receiver DF project.
>

--
Al Klase - N3FRQ
Flemington, NJ
http://www.skywaves.ar88.net/

Message-ID: <000c01c6804d$3328b220$ad00a8c0@Morris1>
From: "Morris Odell" <vilgotch@bigpond.net.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Selsyns
Date: Fri, 26 May 2006 08:47:28 +1000
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "Bill Hawkins" <bill@iaxs.net>
>
> There were other things that looked like selsyns, but weren't.

There are also "resolvers" which have 2 high impedance rotor windings designed to give X-Y voltages that represent the difference between the stator input and the shaft position. If you connect the rotor windings to the X and Y inputs of a scope you get a nice rotating line that turns with the shaft of either the local resolver ot the remote transmitter.

Morris

From: "Gary H. Harmon Jr." <gharmon@idworld.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Hallicrafters SX-88 Receiver For Sale or Trade
Date: Thu, 25 May 2006 22:35:58 -0500
Message-ID: <008101c68075$80f97980$4001a8c0@yourtwa0macjqu>
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

=09
Nice classic (rare) Hallicrafters SX-88 tube receiver.=A0 It's a RUN 2, =
serial

number 296.=A0 Receiver looks very nice and works well.=A0 It has been
recapped.=A0 Front panel has been redone and the warped bezel replaced =
with a
remanufactured one.=A0 Warped bezel will be included for a souvenir.=A0 =
Dial
glass and knobs are excellent.=A0 Case could stand a painting.=A0 Needs =
3 wire
cord installed for safety.=A0 The two IF cans in the left rear were =
damaged
when someone worked on the receiver.=A0 IF cans have been repaired but =
could
have been repaired neater.=A0 Original manual. I estimate the =
receiver's
value at around $5K.=A0 I'll sell it for that and I'll be happy to =
consider
trade/cash offers.=A0 Pictures are available to interested parties. =
Hank
Arney heavy duty shipping box available for safe shipping.

73, gary

=3D=3D=3D=3D=3D=3D=3D=3D=3D////////=3D=3D=3D=3D=3D=3D=3D=3D=3D=20
Gary H. Harmon, Jr. - K5JWK=20
6003 Archwood=20
San Antonio, TX 78239-1504=20
210.657.1549 home=20
210.884.6926 cell=20
gharmon@idworld.net=20
"Veritas vos Liberabit"

Message-ID: <4476A5B1.8070208@nf6x.net>
Date: Thu, 25 May 2006 23:52:33 -0700
From: "Mark J. Blair, NF6X" <nf6x@nf6x.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: ID-637/ARN-59
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Dr. Barry L. Ornitz wrote:
> The indicator does not use DC signals, but rather, a 400 Hz selsyn. I
> think it was a 26-volt version. If you are not familiar with basic
> synchros or selsyns, these are basically specialized forms of motors. The
> rotor winding is excited with an AC voltage, and the stator has three
> windings each 120 degrees out of phase with each other.

The connector only has four pins. I thought that selsyns needed more

wires (i.e., five or more). It does respond to DC signals, though that
doesn't necessarily mean that it normally uses DC drive voltages.

--
Mark J. Blair, NF6X <nf6x@nf6x.net>
Web page: http://www.nf6x.net/
GnuPG public key available from my web page.

Message-ID: <004601c68149$5d645510$ad00a8c0@Morris1>
From: "Morris Odell" <vilgotch@bigpond.net.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: ID-637/ARN-59
Date: Sat, 27 May 2006 14:52:32 +1000
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "Mark J. Blair, NF6X" <nf6x@nf6x.net>

> The connector only has four pins. I thought that selsyns needed more
> wires (i.e., five or more). It does respond to DC signals, though that
> doesn't necessarily mean that it normally uses DC drive voltages.

It's possible to connect selsyns with 4 wires. The stator & rotor circuits
can share one common conductor as they are electrically separate. The
commoned wire could be grounded so in a suitable situation you could even
get away with 3.

Morris VK3DOC

From: "Dr. Barry L. Ornitz" <ornitz@charter.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: ID-637/ARN-59
Date: Sat, 27 May 2006 01:27:25 -0400
Message-ID: <001a01c6814e$44b8c5f0$b0165047@barry1>
MIME-Version: 1.0
Content-Type: text/plain;
     charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I previously wrote:

> The rotor winding [of a selsyn] is excited with an AC voltage, and the
> stator has three windings, [each] 120 degrees out of phase with the
> others.

To which Mark, N6FX, replied:

> The connector only has four pins. I thought that selsyns needed more
> wires (i.e., five or more). It does respond to DC signals, though that
> doesn't necessarily mean that it normally uses DC drive voltages.

The connector actually has five "pins" if you consider the body of the MS connector too. One end of the three stator windings is connected together in a "Y" connection at both selsyns. The other ends of the windings connect to three of the pins. One of the rotor windings is grounded and the other connects to the fourth pin (at least on my unit). Generally selsyns are wound with one rotor winding and three stator windings because there is more room on the stator for multiple windings.

While the selsyn does "respond" to DC voltages, it does not produce unambiguous readings when used this way. Typically the rotor would lock at one of several fixed points.

In Mark's original post on this subject he referred to sine and cosine signals. While some early radar types used specially wound sine/cosine potentiometers, I think he may actually be thinking about the resolver which Morris, VK3DOC, wrote about. These are similar to a selsyn but the two stator windings are in phase quadrature. These were used in later radar CRT displays that used a fixed CRT rather than earlier devices that used a rotating CRT, or rotating deflection coil, or even a special radial deflection CRT (*). Typically a selsyn would be used to track the rotating antenna with a second selsyn attached to a resolver at the receiver. The resolver output would be fed to the CRT giving the angular direction; intensity modulation would increase the CRT brightness at the appropriate point to indicate distance.

I have a selsyn indicator similar to the ID-637 but larger. It has a four=pin connector too. This connector is a standard Amphenol MS connector which can be ordered from Allied or Newark Electronics (but expect to pay through the nose!). I cannot remember his name (perhaps Perry?) but there is a fellow from Kentucky (who I think is on this list) that carries a huge inventory of just about any military connector ever made! Perhaps someone can jump in and provide this information.

73, Barry WA4VZQ Ornitz@tricon.net

(*) Again old age is showing in my memory. I cannot remember the common radial deflection CRT tube type number that found extensive use in WWII. It had a connection to the deflection pin in the center of the CRT face. I think it had a 3 inch face, but looking at my CRT data for "3?P1" I could not find it. If anyone has knowledge of a source of these at a good price, please let me know as I have always wanted to play with one!

Message-ID: <d13941db0605271845h45eab788k492d99ac3ceed95a@mail.gmail.com>
Date: Sat, 27 May 2006 18:45:52 -0700
From: "Dennis Wade" <sacramento.cyclist@gmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Help ID'ing Homebrew Amp.
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline

Good Evening,

At a recent hamfest, I found what appears to be a homebrew RF power amp. There is a choke input power supply, and by the ratings I'm expecting about 1.5 KV at around 300-400 ma. There is a tank assembly, and a plate choke on the top of the chassis that is pi wound, appears commercial. The power supply uses 2 816's. The final tubes, are..of course missing.

--=20
Dennis L. Wade
KG6ZI
Carmichael, CA

Message-ID: <d13941db0605271857m72ecbf74me0f2171ef1b7bc0@mail.gmail.com>
Date: Sat, 27 May 2006 18:57:59 -0700
From: "Dennis Wade" <sacramento.cyclist@gmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Help ID'ing Homebrew Amp.
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline

And now I see I forgot to describe the final sockets....good grief....

They are 7 pin with no index post..in fact I don't know how, by looking..the tubes go in just one way..maybe the pin spacing is different enough, but I can't tell by looking at the empty sockets.

Sorry about the disjointed emails....

Dennis

On 5/27/06, Dennis Wade <sacramento.cyclist@gmail.com> wrote:
> Please excuse me...somehow this got sent before I was done....to continue=
...
>
> On 5/27/06, Dennis Wade <sacramento.cyclist@gmail.com> wrote:
> > Good Evening,
> >
> > At a recent hamfest, I found what appears to be a homebrew RF
> > power amp. There is a choke input power supply, and by the ratings
> > I'm expecting about 1.5 KV at around 300-400 ma. There is a tank
> > assembly, and a plate choke on the top of the chassis that is pi
> > wound, appears commercial. The power supply uses 2 816's. The final
> > tubes, are..of course missing.
>
> There are 4 positions for the final tubes. The input comes
> from the UHF coax connector and goes right to each of the 4 sockets
> with an RFC to ground. No filament choke, no input tuning of any
> kind.
>
> There are 3 pins of each socket tied together and grounded on
> each socket. Filiment power appears to be 12.6 volts fed directly
> from a transformer in the power supply end of the chassis. A cathode
> driven amp?
>
> Power output is taken from topside plate network and fed back
> under the chassis and a loading cap to another SO-239 (can this
> arrangement be stable..output and input both under chassis?).
>
> I can take pics of whatever someone wants to see if it would
> help. Any thoughts?
>
> Thanks,
>
> Dennis
>

--=20
Dennis L. Wade
KG6ZI
Carmichael, CA

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End of BOATANCHORS Digest 3925
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